19980814.qrp v01_n183.qrs.980814

Date: Fri, 14 Aug 1998 19:03:14 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 1183

QRP-L Digest 1183

Topics covered in this issue include:

 1) [17522] QSOed SM4CAN w/no key (& no mic)!!
 by w0yse@juno.com (Neil Klagge)
 2) [17523] Re: Help! Stancor Transformer
 by Stephen Lee <slee@u.washington.edu>
 3) [17524] Stancor A-4723 Specs
 by wj5o@JUNO.COM (William H. Hays)
 4) [17525] Elmer 101 Sprint log
 by "Craig B. Johnson" <johns516@maroon.tc.umn.edu>
 5) [17526] 15M DX
 by "Joe <HS2JFW>" <pornchai@daisy.bu.ac.th>
 6) [17527] Re: QSOed SM4CAN w/no key (& no mic)!!
 by Vic Rosenthal <rakefet@rakefet.com>
 7) [17528] Elmer 101: Parts list online?
 by "KA5T Larry Wise" <lewise@inetport.com>
 8) [17529] Summer MFJ Newsletter Out
 by Paul Harden <na5n@rt66.com>
 9) [17530] DK9SQ Portable Mast Announcement
 by "Bill Kelsey - N8ET - Kanga US" <kanga@bright.net>
 10) [17531] Buckmaster Callsign Server Is Back
 by DENNISMO@aol.com
 11) [17532] Rig Chatter
 by "James Fielden" <fielden@utkux.utcc.utk.edu>
 12) [17533] RE:Schematic Software?
 by "Tony Fishpool" <g4wif@btinternet.com>
 13) [17534] The Zombie Shuffle Oct. 31Z
 by Paul Harden <na5n@rt66.com>
 14) [17535] FS: Service Manual for ts130
 by Paul Erickson <paule@sfu.ca>
 15) [17536] Re: Mini Paddles
 by K4AHK@ix.netcom.com
 16) [17537] Re: Mini Paddles
 by Wayne Alexander <walexander@wwn.net>
 17) [17538] Gibson EH-150 amplifier
 by Wayne Alexander <walexander@wwn.net>
 18) [17539] Vertical antennas and ground rods?
 by John Mckee <JMcKee@RFMD.com>
 19) [17540] Audio oscillator

by Stewart Whitehouse <STEW_W@compuserve.com>
20) [17541] RE:Schematic Software?
by "Vincent Ferme" <vferme@sprint.ca>
21) [17542] Which type resistor?
by David Shalita <af389@lafn.org>
22) [17543] RE: Vertical antennas and ground rods?
by "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
23) [17544] RE: 15M DX
by "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
24) [17545] Re: Vertical antennas and ground rods?
by "John J. McDonough" <jjmcd@tm.net>
25) [17546] Elmer 101: audio oscillation
by Bensondj@aol.com
26) [17547] Re: The Zombie Shuffle Oct. 31Z
by Monte Stark <ku7y@dri.edu>
27) [17548] AL7FS QSL status
by "Jim Larsen (AL7FS)" <larsennc@alaska.net>
28) [17549] SW40+ receiver gain, elmer sprint
by Glen Leinweber <leinwebe@mcmail.cis.mcmaster.ca>
29) [17550] Re: The Zombie Shuffle Oct. 31Z
by Ed Manuel <n5em@flash.net>
30) [17551] QRP mobile bike
by Armstrongs <barmstrong@MAIL.SISNA.COM>
31) [17552] Re: The Zombie Shuffle Oct. 31Z
by "Michael A. Gipe" <mgipe@reliablemeters.com>
32) [17553] Re: The Zombie Shuffle Oct. 31Z
by flydnq7x@primenet.com (Floyd Smithberg)
33) [17554] RE: Vertical antennas and ground rods?
by "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
34) [17555] Re: Miles per watt with BPSK?
by "laura halliday" <marsgal42@hotmail.com>
35) [17556] Re: component description
by Dave Sjolin <sjolin@swbell.net>
36) [17557] Antennas & Lightening
by Monte Stark <ku7y@dri.edu>
37) [17558] Ten Meter Foxes Awake !!
by "GARY McCAUGHEY" <MAIL4GARY@worldnet.att.net>
38) [17559] Re: 15M DX
by RangerSF5@aol.com
39) [17560] How to orient audio xfmr
by PDouglas12@aol.com
40) [17561] RESULTS OF THE 1998 FLIGHT OF THE BUMBLEBEES
by "Russ Carpenter" <russ@natworld.com>
41) [17562] Soapbox for the 1998 Flight of the Bumblebees
by "Russ Carpenter" <russ@natworld.com>
42) [17563] Re: Which type resistor?
by Leon Heller <leon@lfheller.demon.co.uk>
43) [17564] Re: Antennas & Lightening

 by Arjen Raateland <Arjen.Raateland@vyh.fi>
 44) [17565] how to orient transformer--thanks guys
 by PDouglas12@aol.com
 45) [17566] RE: Antennas & Lightening
 by "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
 46) [17567] Re: elmer101 audio instability
 by hodgins@rtp.semi.harris.com (Bob Hodgins (919)405-3620)
 47) [17568] Great Vertical Antennas memo
 by "rohre" <rohre@arlut.utexas.edu>
 48) [17569] Re: SW40-plus receiver gain
 by n7ri@juno.com (Ralph L Irons)
 49) [17570] Re: SW40+ receiver gain, elmer sprint
 by "j.w. thornton" <dub@oklahoma.net>
 50) [17571] Re: elmer101 audio instability
 by "j.w. thornton" <dub@oklahoma.net>

Date: Thu, 13 Aug 1998 17:01:28 -0600
From: w0yse@juno.com (Neil Klagge)
To: qrp-l@Lehigh.EDU
Subject: [17522] QSOed SM4CAN w/no key (& no mic)!!
Message-ID: <19980813.170129.14590.2.w0yse@juno.com>

I wouldn't have believed this but it happened to me today.

I decided to go on my first backpacking QRP adventure into the mountains above Ogden, Ut today. I had everything, right?? I found a good spot with a couple of tall trees into which I threw up an EFHWA (end fed half wave ant.). It loaded up very well and I heard G3BTM loud and clear. I reached into my pack to find the key....... NO KEY. NO PADDLES either!!! ARRRGGGGG!! Since my MFJ-9020 has a speaker, I decided to use the earphone plug as a key to tune up the tuner. Then I tried calling G3BTM by moving the plug in and out of the key jack. It was slow and sloppy. I think he heard me, but since I sounded like a pre-novice, he was not about to entertain a QSO with THAT fist.

So I decided to tune up to the QRP freqs and found SM4CAN/qrp calling a weak CQ. I answered him with my "plug fist" and lo' and behold, he came back to me and gave me a 449. I about died!! Kent was running only 5 watts to my 2 or so (low batteries).

It jus' shows-ta-go-ya that you should nevvva give up!! (or "where there's a will, there's a way).

72 , Neil, w0yse since '54

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at http://www.juno.com
Or call Juno at (800) 654-JUNO [654-5866]

Date: Thu, 13 Aug 1998 16:19:19 -0700 (PDT)
From: Stephen Lee <slee@u.washington.edu>
To: "William H. Hays" <wj5o@juno.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17523] Re: Help! Stancor Transformer
Message-ID: <Pine.A41.3.95b.980813160136.67306A-100000@homer35.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On page 28 of the Stancor Catalog is a formula for approximating
the turns ratio in a transformer, as follows:
P=driving power for the tube to be driven (6SN7 in this case)
ZsubL=plate load impedance of driver tube (6SN7's plate load Z)
Es= peak grid-to-grid signal voltage required for tube to be
 driven (pertains to the 6SN7 in this situation)

In computerese the formula looks like: (sqrt(P*ZsubL))/(.035*Es)
That is the approximate ratio of the Primary to one-half the
Secondary (1:0.5). You need the specs on the tube, Bill.

Stancor is a division of Emerson Electric, located in St. Louis,
Missouri. Their phone number is listed as (314) 865-8799.

de AB7HI, Stephen Lee, Federal Way, WA

On Thu, 13 Aug 1998, William H. Hays wrote:

> Help again is needed. I'm constructing the one tube regenerative
> receiver from the ARRL 1955 Handbook. The schematc calls for a
> Interstage audio transformer (Stancor A-4723) <snip: tube is 6SN7>
> Any help will be appreciated. > TNX & 73 Bill WJ5O

Date: Thu, 13 Aug 1998 20:20:04 cdt
From: wj5o@JUNO.COM (William H. Hays)
To: TENTEN-L@Lehigh.EDU, QRP-L@Lehigh.EDU
Subject: [17524] Stancor A-4723 Specs
Message-ID: <19980813.202131.4870.3.WJ5O@juno.com>

Sorry, but the "hand is faster than the eye"--at least I think that was what happened.
I accidently deleted a response to my help on info on Stancor interstage transformer.
I still have the replies of:
David Lawson
 AB7HI, Stephen Lee
Alan WA5DJU a vintage radio nut

If you sent the one I "zipped away", please re-send info. I think it happened 'cause I rested my finger on the delete key-------I think I read the first line and it gave a turns ratio.

72/73 Bill WJ5O

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at http://www.juno.com
Or call Juno at (800) 654-JUNO [654-5866]

Date: Thu, 13 Aug 1998 20:26:13 -0500
From: "Craig B. Johnson" <johns516@maroon.tc.umn.edu>
To: <QRP-L@Lehigh.EDU>
Subject: [17525] Elmer 101 Sprint log
Message-ID: <001e01bdc722$d6e9bd60$a1d65ea0@pentium>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Here is my log for the Elmer 101 Sprint on August 13, 1998.

0120	KB9NUN	Kevin	IL	?W
0141	N9KW	John	IL	Student
0146	WA0STX	John	MO	?W
0155	K0EVZ	Doc	MN	2W
0204	WA5YFY	Dub	OK	Student
0214	KC8JIE	ED	MI	Student
0219	K9NO	Paul	IL	?W

Three of the contacts (marked ?W) were "outsiders" that answered my "CQ Elmer" and just wanted to chat. Nice. Really impressed one guy when he heard I was running 2 watts! Always fun to shock people who have never tried

QRP.

The Sprint was a lot of fun. I did miss the RIT feature, though.
"Almost" got N8WVD but he got clobbered by QRM before we could finish.
I'm quite sure I could have pulled him out if I could have tuned around a
bit
with RIT.

I would like to add my thanks to all the elmers. My SW-40+ is a cute little
rig and I really have been havng fun with it, talking to people all around
the
country in the last couple of weeks. To me, what was even more important
was
what I learned in the process of building it. I would say the Elmer 101
course was a huge success.

72,
Craig, AA0ZZ, St. Paul, MN

Date: Fri, 14 Aug 1998 09:09:34 +0700
From: "Joe <HS2JFW>" <pornchai@daisy.bu.ac.th>
To: "qrpl" <qrp-l@Lehigh.EDU>
Subject: [17526] 15M DX
Message-ID: <008d01bdc728$94eb26a0$b8e794cb@HS2JFW.bu.ac.th>
MIME-Version: 1.0
Content-Type: multipart/alternative;
 boundary="----=_NextPart_000_008A_01BDC763.41192AA0"

This is a multi-part message in MIME format.

------=_NextPart_000_008A_01BDC763.41192AA0
Content-Type: text/plain;
 charset="windows-874"
Content-Transfer-Encoding: quoted-printable

Hi QRP Gang,
Yesturday I did work dx on 15M. I turned on my tranciever and made QSO =
with my friend
at Pattaya City ,HS2PFon 40M. After that I change the band to 20M. The =
band not quite good with me. Nill for DX station at me then I changed to =
15M. WOW, a lot of DX station from Europe and some from SA and NA. I =
tuned around CW portion.I found W4CNJ,Nix calling CQ on 21.020 MHz. When =
he send switch K. I imediate call him back. Yoopie.....he reply to me =
with my call ??2JFW/QRP. And I called him again with my callsign. He =

gived me 419 from Alabama and I gived him 559. Nix use 4 elements yagi =
with 100Watts TS-850 while I use FT-757SX to Dipole and 4 Watts.
Yes....It's really 4 watts.=20
 After I finished QSO with Nix , I looked for SSB on 15M and =
founded many station from EU and some from USA. I try to called but not =
worked cause I have only 5 watts on that.
My antenna got high SWR at SSB portion. I heard A61AS from UAE calling =
CQ. I shouted to my microphont A61AS from HS2JFW/QRP. I very surprise =
the he call me back HS2JFW/QRP your are 57 in Dubai and name is Andy. I =
gived home 59.
 I tried to worked some more on SSB and founded DF4FR calling CQ =
angin and again. Icall hime back. He reply me back and gived me 57 from =
Germany.
 I worked all of this guy with 4-5 watts.It's very good day for =
me.
 73/72 HS2JFW, Joe
**
 Pornchai Semjang ,Joe QRP-L #938
 HS2JFW , N3YGP QRP-HS#1
 Bangkok University =20
 semjang@lily.bu.ac.th
 pornchai@daisy.bu.ac.th
 HomePage "http://www.qsl.net/~hs2jfw"
 Callbook Thailand "http://hs2jfw.ml.org"
**

------=_NextPart_000_008A_01BDC763.41192AA0
Content-Type: text/html;
 charset="windows-874"
Content-Transfer-Encoding: quoted-printable

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<META content=3D"text/html; charset=3Dwindows-874" =
http-equiv=3DContent-Type>
<META content=3D'"MSHTML 4.72.2201.0"' name=3DGENERATOR>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV>Hi QRP Gang,</DIV>
<DIV>Yesturday I did work dx on 15M. I turned on my =
tranciever=20
and made QSO with my friend</DIV>
<DIV>at Pattaya City ,HS2PFon 40M. After that I =
change the band=20
to 20M. The band not quite good with me. Nill for DX station at me then =

I=20
changed to 15M. WOW, a lot of DX station from Europe and some from SA =
and NA. I=20
tuned around CW portion.I found W4CNJ,Nix calling CQ on 21.020 MHz. When =
he send=20
switch K. I imediate call him back. Yoopie.....he reply to me with my =
call=20
??2JFW/QRP. And I called him again with my =
callsign. He=20
gived me 419 from Alabama and I gived him 559. Nix use 4 elements yagi =
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100Watts TS-850 while I use FT-757SX to Dipole and 4 Watts.</DIV>
<DIV>Yes....It's really 4 watts. </DIV>
<DIV> After =
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and some from USA. I try to called but not worked cause I have only 5 =
watts on=20
that.</DIV>
<DIV>My antenna got high SWR at SSB portion. I heard =
A61AS from=20
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Andy. I=20
gived home 59.</DIV>
<DIV> I =
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worked some more on SSB and founded DF4FR calling CQ angin and again. =
Icall hime=20
back. He reply me back and gived me 57 from Germany.</DIV>
<DIV> I =
worked all of=20
this guy with 4-5 watts.It's very good day for me.</DIV>
<DIV><FONT color=3D#000000 face=3DArial=20
size=3D2> 73/72 =
HS2JFW,=20
Joe</DIV>
<DIV><FONT=20
size=3D3>**********=

 Pornchai=20
Semjang=20
,Joe &nb=
sp;=20
QRP-L #938
 HS2JFW ,=20
N3YGP &n=
bsp; =20

```
QRP-HS#1<BR> Bangkok University      =
<BR> <A=20
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href=3D"mailto:pornchai@daisy.bu.ac.th">pornchai@daisy.bu.ac.th</A><BR>&n=
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Thailand &quot;<A=20
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------=_NextPart_000_008A_01BDC763.41192AA0--



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Date: Thu, 13 Aug 1998 19:37:45 -0700
From: Vic Rosenthal <rakefet@rakefet.com>
To: w0yse@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17527] Re: QSOed SM4CAN w/no key (& no mic)!!
Message-ID: <35D3A2F9.F40FF6F5@rakefet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Neil Klagge wrote:

>  Then I tried calling
> G3BTM by moving the plug in and out of the key jack.  It was slow and
> sloppy.

In a similar circumstance, I have removed the plastic cover and bent the two
metal thingies inside the plug to be very close together.  After that, one can
turn it so the longer (grounded) thingie is up and send quite comfortably with
one's index finger.

Vic, K2VCO



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Date: Fri, 14 Aug 1998 03:28:20 -0500
From: "KA5T Larry Wise" <lewise@inetport.com>
```

To: "qrp" <qrp-l@Lehigh.EDU>
Subject: [17528] Elmer 101: Parts list online?
Message-ID: <199808140327.WAA09477@admin.inetport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Gang:

Is the parts list for the SW40+/SW30+ on line somewhere?
In particular the coil specs??

I do not see it at the Elmer 101 web site or at K5FO's web site...
Or at the Small Wonder site....
Did I miss it?

Larry KA5T

Date: Thu, 13 Aug 1998 21:37:46 -0600 (MDT)
From: Paul Harden <na5n@rt66.com>
To: qrp-l@Lehigh.EDU
Subject: [17529] Summer MFJ Newsletter Out
Message-ID: <Pine.SUN.4.02.9808132124220.19665-100000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

QRPers with that "MFJ" persuasion ...

All of the summer "MFJ Newsletters" were mailed yesterday first class
mail, so they should be arriving shortly. On the technical side, the
issue finishes up the alignment procedures with the transmitter items,
and discussion/waveforms of what the alignment procedures is
accomplishing. Circuit theory covers the AGC and the gain reduction
aspects of the MC1350 IF amplifier, followed by a simple mod for
adding a fast/slow AGC to the MFJ's (requires only a SPST switch
and 5K resistor, no traces to cut). There are plenty of extra
copies for those who just recently got an MFJ or don't get the
MFJ Newsletter.

The Fall issue will contain some neat mods (like adding a dummy load)
to the MFJ-971 QRP Antenna Tuner.

Subscriptions are $10/year US/VE and $12.50/year DX, to

Paul Harden, NA5N
P.O. Box 757
Socorro, NM 87801

Or email me for more info, samples, etc.

72, Paul NA5N
MFJ 9040, 9030, 9020, etc.

Date: Thu, 13 Aug 1998 23:43:34 -5
From: "Bill Kelsey - N8ET - Kanga US" <kanga@bright.net>
To: qrp-l@Lehigh.EDU
Subject: [17530] DK9SQ Portable Mast Announcement
Message-ID: <199808140343.XAA21840@sparticus.bright.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

I am still trying to get inforrmation on the cost of the duty that will be charged when I bring the masts into the US from Germany, however, rather than wait another week while I am out of town, I wll set an initial price so I can start taking orders and place the initial order in Germany when I return on the 24th. Hopefully I won't miss the cost by too much!

The initial price will be $99 US, plus my standard $5 s/h.

The mast is described on my web page - URL below - complete with a picture of the extended mast. It collapses to a size of one meter, and is ten meters extended.

There is also some information on pages 33 and 34 of the August '98 Issue of QST.

I can take orders via e-mail, US mail, or telephone. My answering machine will be left on while I am gone, however, if the electricity goes off it will not answer until the PC is re-booted. I can take Checks, Money Orders, and VISA/ MC. US Dollars please. Shipping to overseas locations will be at cost.

I will respond to e-mail questions after the 24th.

Orders to:

Kanga US
Bill Kelsey - N8ET
3521 Spring Lake Dr.
Findlay, OH 45840
419-423-4604
kanga@bright.net
www.bright.net/~kanga/kanga/

73 - Bill - N8ET
Kanga US
kanga@mail.bright.net
http://www.bright.net/~kanga/
419-423-4604

Date: Fri, 14 Aug 1998 01:00:28 EDT
From: DENNISMO@aol.com
To: qrp-l@Lehigh.EDU
Subject: [17531] Buckmaster Callsign Server Is Back
Message-ID: <ee1ee777.35d3c46e@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Hi Gang...

Thanks to all who responed. I tried the site tonight - 0450Z Friday and Buckmaster is back up again. BTW Mike KU4TZ, sent me the folow site as an altenative. It is great and I thought that I'd share it with all the fine folks here. Here it is:
 K3WWP - QSL Lookup

Tnx agn es God Bless -

72 de Denny AD6EZ <><
Promise Keeper / FISTS #4570 / Goleta, CA

Date: Thu, 13 Aug 1998 23:59:07 -0400
From: "James Fielden" <fielden@utkux.utcc.utk.edu>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [17532] Rig Chatter

Message-ID: <01bdc737$e2521200$9912a980@galaxian>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello All,
WoW I did it, today I made my first contact with my WIlderness Radio Norcal 40a. It was really cool to make a contact, first one in over a month now, and it was done with a radio that I built!!! I was running 1 watt into my Mini-G5RV that I made and stuck up into my Attic today. I hope this was not a fluke and I'm now going to be able to work some stations...
I also put a 20 Meter dipole up there the HW-8 Didn't like it to well with out a tuner but it hears good. I also just built one of the little TechSonic MX-20 Meter Transmitters. GREAT little transmitter it's a load of fun using it on 14.060 Receiving with my Big old Hallicrafters SX-140...
I'm using a 12 Volt Rechargeable Power Source that I bought at Target a month or so ago, really neat has multi-volt output 3/6/9 and two 12 Volt Lighter plugs...
I was able to stuff one more Antenna in the attic, I took two metal slinkys made a dipole with them, it tunes up good on 80 Meter so not bad in a space 30' long 10' width and about 5' high...
And last but not least, wanted to think everyone for the comments on the SST Receive, seems like it's just made to have low audio, but I did notice I hear alot of signals with it, I've never been able to work anyone on 30 Meter, but I'm still hear pounding away, listen for me... 10.106 to 10,116 somewhere in there...
Well that was a day in my qrp life, thanks for listening, best dx es 72 es Hpe to Wrk U SooN

73 * Jim, KU4QW
fielden@utkux.utcc.utk.edu
No-SSB International (tm)
Member Number 1,000,014
http://web.utk.edu/~fielden/

Date: Fri, 14 Aug 1998 05:52:19 +0100
From: "Tony Fishpool" <g4wif@btinternet.com>
To: "QRP-l" <qrp-l@Lehigh.EDU>
Subject: [17533] RE:Schematic Software?
Message-ID: <E0z7C4b-0006gv-00@praseodumium.btinternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Bill N2CQR wanted some schematic software that included valves (sorry tubes to the colonials). I think Vince, VE3VFN posted the original "heads up" on the Design Works Light freeware program. It really is very good and it only took me minutes using the component creator utility to add a triode to my library. I was also able to add a proper resistor symbol instead of a "wiggley line" :-)

I downloaded my copy from:-

http://hotfiles.zdnet.com/cgi-bin/texis/swlib/hotfiles/search.html

.. and search for DWORKLTE.ZIP

The printouts are very good, if anyone has found a way of getting the schematics into other formats (JPG etc.) I would be interested to hear from them. At the present I'm resorting to screendumping and twiddling it in Paint Shop Pro.

72
Tony - G4WIF
Dartford, Kent, England

Date: Fri, 14 Aug 1998 00:50:39 -0600 (MDT)
From: Paul Harden <na5n@rt66.com>
To: qrp-l@Lehigh.EDU
Subject: [17534] The Zombie Shuffle Oct. 31Z
Message-ID: <Pine.SUN.4.02.9808140011310.21390-100000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Preliminary Announcement only. May be subject to change depending upon the whims of those involved, Y2K, the Clinton testimony and other factors.

I'm starting to get lots of email about what was decided at the Ft. Tuthill campfire about the Zombie thing, so here goes.

THE ZOMBIE SHUFFLE (because Zombies don't Sprint) contest will be a short informal QRP-L contest on Halloween eve, UTC ... that's friday night, October 30th in the US/VE/XE/CO, etc. (so it doesn't interfere with the real Halloween Eve). A friday night special of sorts. It will be any 3-hour period you choose from local sundown to midnight on 40M and 80M. The idea is to go "trick or treating"

on the air.

EXCHANGE: RST, SPC, Name and Zombie number
NOTE: Use your telephone AREA CODE if you don't have a Zombie number.

BASIC SCORE is the sum of Zombie numbers/Area Codes worked.
BONUS POINTS:
 666 points if you're also a warewolf
 666 points if you worked 13 or more prime numbers
 666 points for each YL/witchesses you work
 666 points if you worked Elvis
 666 points for working a Grand Zombie (Zombie #001 to 025)
 ... we'll probably think of a few more

MULTIPLIERS:
 Zombies (i.e., men) multiply by "pi" (3.1416)
 Witchesses (i.e. YL's) multiply by "2-pi" (6.28)
 You can use any resolution of pi you wish.

WE NEED WITCHESSES!!! Halloween and Zombies are no fun without some witchesses. So come on you YL's ... here's your big chance to score big (OK, maybe a poor choice of words). Send "YL" or "witchess" or whatever before your name so we can get the points, and you YL's get to multiply your score by two.

PRIZES: So far, we have a few donations by individuals and clubs, including such things as:
* VCR tape of "Night of the Living Dead," "Zombies" and other hoakie B&W, Peter Cushing, castle on the hill type of 1950's movies.
* "Elvira" posters and T-shirts
* Box of "Frankenberry" and "Count Chocula" cereal.
* Nifty death-certificates for all
* etc.

This is a "QRP-L" contest thingie, and I will probably handle the logs (via email) if no one else is stupid enough to volunteer (which means poor old NorCal Witchess Sandra gets to sort them out!). It's strictly for fun, no trips to Hawaii or anything. Yes, you can use your 100 ft. towers, 4-element beams, from the comfort of your domicile, AC power, state-borders, maritime mobile, WHATEVER ... as long as output power, as measured on the collector of the PA transistor, is 5W or less.

If you have any ideas for rules, scoring, length of time, prizes, etc., please let me know. And for the official announcement, I'll try to figure out how to word the rules a bit more concise -hi.
I tried to incorporate all the ideas that were bounced around at Ft. Tuthill (prime numbers, using "pi", encouraging YL's, etc.)

72, Paul NA5N
Zombie #004

and fellow perpetrators as I remember
Bob and Bertie Hightower
Roger Hightower
Brian Kassel
Jay Miller
Jim Duffey
Joe Garvis
Chuck Adams
Doug Hendricks
Joanne Hendricks
Vern Wright (and June)
Gary Surrency
Mike Conner
and a few others I can't remember

And if you *do* feel compelled to comment on this on the group,
PLEASE do not include the whole thing in your reply. Chuck will
kill me.

Date: Fri, 14 Aug 1998 00:49:06 -0700 (PDT)
From: Paul Erickson <paule@sfu.ca>
To: qrp-l@Lehigh.EDU (qrp)
Subject: [17535] FS: Service Manual for ts130
Message-ID: <199808140749.AAA10727@fraser.sfu.ca>
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

I have a copy of the service manual and IRC supplements for the
Kenwood TS130. Open to offers.

cheers, Paul VE7CQK/email: paule@fraser.sfu.ca

Date: Fri, 14 Aug 1998 06:40:23 -0400

From: K4AHK@ix.netcom.com
To: Paul Erickson <paule@sfu.ca>
Cc: qrp-l mail <qrp-l@Lehigh.EDU>
Subject: [17536] Re: Mini Paddles
Message-ID: <35D41413.1E76@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Re: email address for Mike March and his keyer paddles:

No, I am not sure about the email address for Mike, but, that is the way
it looks on a flyer that I got at the hamfest. Because of the font that
he used, it could just as well be lmmarch@visuallink.com instead of
immarch - - - (el instead of eye). Using his initials would make it
jmmarch (jay). I have never used his email address so don't know which
one is correct.

Sorry for the misinformation. His snail mail address on the flyer is:

J. M. March Magnetic Paddles
242 Clayhill Dr.
Winchester, VA 22602

Bill - K4AHK

Date: Thu, 13 Aug 1998 23:43:21 -0500
From: Wayne Alexander <walexander@wwn.net>
To: qrp-l@Lehigh.EDU
Subject: [17537] Re: Mini Paddles
Message-ID: <3.0.3.32.19980813234321.0069e0c8@pop.wwn.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

his E-Mail address is:<lmmarch@visuallink.com>

>Re: email address for Mike March and his keyer paddles:
>
>No, I am not sure about the email address for Mike, but, that is the way
>it looks on a flyer that I got at the hamfest. Because of the font that

>he used, it could just as well be lmmarch@visuallink.com instead of
>immarch - - - (el instead of eye). Using his initials would make it
>jmmarch (jay). I have never used his email address so don't know which
>one is correct.
>
>Sorry for the misinformation. His snail mail address on the flyer is:
>
>J. M. March Magnetic Paddles
>242 Clayhill Dr.
>Winchester, VA 22602
>
>Bill - K4AHK
>
>
73, KB=D8PTE
Wayne
QRP-L #1=D858
FISTS #49=D87
(CW,What a feeling!)

Date: Thu, 13 Aug 1998 23:46:21 -0500
From: Wayne Alexander <walexander@wwn.net>
To: collins@qth.net, forsale-swap@qth.net, hallicrafters@qth.net,
heath@listserv.tempe.gov, qrp-l@Lehigh.EDU
Cc: hams@mail.orion.org
Subject: [17538] Gibson EH-150 amplifier
Message-ID: <3.0.3.32.19980813234621.006a6210@pop.wwn.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

If you have any info on this,Please send it to Randy and his E-Mail address
is at the bottom. Thanks

>From: <ES355TDS@aol.com>
>Date: Fri, 14 Aug 1998 00:16:57 EDT
>To: walexander@wwn.net
>Subject: Gibson EH-150 amplifier
>X-Mailer: AOL 3.0 for Windows 95 sub 64
>
>I am looking for a schematic of a 1930's Gibson EH-150 amplifier. It is the
>model with the removable amp section, has seperate treble and bass=
 controls,
>three 6J7 preamp tubes, a 6N7 driver tube, and two 6L6 power tubes.=20
>

>Please do not confuse this amp with the other more common version of the
>EH-150 that has one tone control, three 6SQ7 preamp tubes, a 6N7 driver=
 tube,
>and two 6L6 power tubes.
>
>Thank you very much.
>
>Randy Buckner
>ES355TDS@aol.com
>=20
>
73, KB=D8PTE
Wayne
QRP-L #1=D858
FISTS #49=D87
(CW,What a feeling!)

Date: Fri, 14 Aug 1998 08:07:44 -0400
From: John Mckee <JMcKee@RFMD.com>
To: "'QRP-L'" <qrp-l@Lehigh.EDU>
Subject: [17539] Vertical antennas and ground rods?
Message-ID:
<c=US%a=_%p=RF_Micro_Devices%l=PACHACUTEC-980814120744Z-42822@proxy1.rfmd.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hello Gang,

Is it necessary to use a ground rod and radial wires under a ground
mounted vertical, or
just radial wires? Why?

Tnx es 73

John WB4OFT Greensboro, NC jmckee@rfmd.com

Date: Fri, 14 Aug 1998 08:28:19 -0400
From: Stewart Whitehouse <STEW_W@compuserve.com>
To: Low Power Amateur Radio <QRP-L@Lehigh.EDU>
Subject: [17540] Audio oscillator

Message-ID: <199808140828_MC2-561A-E38D@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Hi folks.
I needed an audio oscillator for my bench so just built
the wide-range audio oscillator from the '95 Handbook.
This uses a single 741 Op amp, a couple of variable
resistors (pots), a 2 pole 4 position wafer switch (mine had
3 poles), some capacitors and two 9V batteries.
This makes a nice project and is an easy transition from
kits to being on your own. Though QRP-L people are never truly
on their own. Help is always an email away. It's also a handy
piece of gear to have around.
I built mine on a general purpose IC PC board (RS 276-150)
and put it in a instrument/modem project case (RS 270-214).
Looks real sharp with red inserts on the knobs.
It isn't so obvious from the schematic, but the two batteries
are in series. You must use a DPDT switch to turn the two
batteries on/off individually. I thought I could switch the common
leads to ground with a SPST but the unit stayed on regardless
of the switch position. The circuit didn't need the common leads
to go to ground to operate! I was uncomfortable with this so went
to a DPDT on/off switch and grounded the common leads. I also
paralleled BNC and phono jacks on the output for flexibility. The
oscillator works fine. I get up to 5V p-p of nice clean sine wave on
the scope from about 10 Hz to 100kHz. Not quite the range advertised
but all that is needed here.
I hope this will encourage some of you to build something while you wait
for your NORCAL 20 kit. =

As the guy at the foot of Mt. Washington sez - "MELT SOLDER"

72
Stew KE4YH
Dunedin, Florida

Date: Fri, 14 Aug 1998 08:37:19 -0400
From: "Vincent Ferme" <vferme@sprint.ca>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [17541] RE:Schematic Software?
Message-ID: <001901bdc780$493df360$e71005d1@frsswilap04284.callnetcanada.com>
MIME-Version: 1.0

Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Better still, go straight to Design Works web page at www.capilano.com .

73/72 de Vince, VE3VFN.

From: Tony Fishpool <g4wif@btinternet.com>

>I downloaded my copy from:-
>http://hotfiles.zdnet.com/cgi-bin/texis/swlib/hotfiles/search.html

Date: Fri, 14 Aug 1998 06:17:55 -0700
From: David Shalita <af389@lafn.org>
To: "Ham-Homebrew@ucsd.edu" <Ham-Homebrew@ucsd.edu>
Cc: "qrp-l@Lehigh.EDU" <qrp-l@Lehigh.EDU>
Subject: [17542] Which type resistor?
Message-ID: <35D43903.F49CA953@lafn.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi,

I am building the Noise Source circuit in 1990 ARRL HAM Handbook, that uses a
Noise/Com Diode and precision 1% resistors.

I found metal film and carbon film 1% resistors for sale.

These resistors are used in the attenuator to establish 50 ohms and a low
SWR. Which type is best for this RF circuit?
Besides Digikey and possibly TECH AMERICA, who sells them?

Thanks, 73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

Date: Fri, 14 Aug 1998 08:45:50 -0500
From: "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
To: <JMcKee@RFMD.com>, "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [17543] RE: Vertical antennas and ground rods?
Message-ID: <19980814134554089.AAA255@muenzlerk>

You need the following to get good performance from a vertical.

1 - an excellent ground
2 - an excellent radial system.

It is more important to have a good radial system. But having
a good ground is pretty important too. If you have a tall vertical
like 40 or 80 meters it is extremely important that you have
good lightning protection. Drive two or three 8-foot ground rods
in the ground right next to the base mount on the ground. Connect
these to the mast (however short it is) with good mechanical
connections. DON'T SOLDER THEM. If you must you may braise them.
Lightning will blow the solder connections and leave you with an
open circuit. Connect a large value resistor (33K or so) between
the vertical radiator and ground. This will bleed the static from
the antenna as it builds up. You can also use an RF choke in place
of the resistor. Be sure it is of sufficient value as to be an
"open circuit" to the RF. Not only will they bleed static but they
will help reduce the noise caused by the static buildup. These
measures WILL NOT guarantee that your antenna will be immune from
lightning but will help some by taking static from the air and
sending it to the ground. For more on lightning safety you can
visit the ARRL web site at http://www.arrl.org/tis/info/lightnin.html
or by visiting the polyphaser web site at http://www.polyphaser.com/

Kevin, WB5RUE
wb5rue@stic.net http://www.qsl.net/wb5rue

> -----Original Message-----
> From: owner-qrp-l@Lehigh.EDU
> [mailto:owner-qrp-l@Lehigh.EDU]On Behalf Of
> John Mckee
> Sent: Friday, August 14, 1998 7:08 AM
> To: Low Power Amateur Radio Discussion
> Subject: Vertical antennas and ground rods?
>
>
> Hello Gang,
>

> Is it necessary to use a ground rod and radial wires under a ground
> mounted vertical, or
> just radial wires? Why?
>
> Tnx es 73
>
> John WB4OFT Greensboro, NC jmckee@rfmd.com
>
>
>

Date: Fri, 14 Aug 1998 08:47:18 -0500
From: "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [17544] RE: 15M DX
Message-ID: <19980814134721870.AAA228@muenzlerk>

Better get used to it! 15 meters is a great band during sunspot
peaks! It outperforms 20 most of the time when it is open
because of the lower noise levels. 10-meters is great too!

Kevin, WB5RUE

begin 666 ATT00022.htm
M/"%$3T-465!%($A434P@4%5"3$E#("(M+R]7,T,O+T141"!7,R!(5$U,+R]%
M3B(^#0H\2%1-3#X-"CQ(14%$/@T*/$U%5$$@2%144"U%455)5CTB0V]N=&5N
M="U4>7!E(B!#3TY414Y4/2)T97AT+VAT;6P[(&-H87)S970]:7-O+3@X-3DM
M,2(^#0H-"@T*#0H\345402!C;VYT96YT/2<B35-(5$U,(#0N-S(N,C$P-BXV
M(B<@;F%M93U'14Y%4D%43U(^#0H\+TA%040^#0H\0D]$62!B9T-O;&]R/2-F
M9F9F9F8^#0H\1$E6/@T*/$1)5CX\1D].5"!325I%/34^/$9/3E0@<VEZ93TU
M/CQ34$%.(&-L87-S/30W,S$U,S,Q,RTQ-# X,3DY.#X\1D].5"!C;VQO<CTC
M,# P,&9F(&9A8V4](B(@#0IS:7IE/3(^/$9/3E0@9F%C93U#;W5R:65R/CQ3
M4$%.(&-L87-S/3@V-34V-#8Q,RTQ-# X,3DY.#X\1D].5"!C;VQO<CTC,# P
M,&9F(T*9F%C93U#;W5R:65R('-I>F4],CY"971T97(@9SPO1D].5#X\+U-0
M04X^970@=7-E9"!T;R!I="$F;F)S<#L@,34@;65T97)S(&ES(&$@#0IG<F5A
M="!B86YD(&1U<FEN9R!S=6YS<&]T(#PO1D].5#X\+T9/3E0^/"]34$%./CPO
M1D].5#X\+T9/3E0^/"]$258^#0H\1$E6/CQ&3TY4(%-)6D4]-3X\1D].5"!S
M:7IE/34^/%-004X@8VQA<W,]-#<S,34S,S$S+3$T,#@Q.3DX/CQ&3TY4(&-O
M;&]R/2,P,# P9F8@9F%C93TB(B -"G-I>F4],CX\1D].5"!F86-E/4-O=7)I
M97(^<&5A:W,A)FYB<W [($ET(&]U='!E<F9O<FUS(#(P(&UO<W0@;V8@=&AE
M('1I;64@=VAE;B -"FET(&ES(&]P96X@/"]&3TY4/CPO1D].5#X\+U-004X^

```
M/"]&3TY4/CPO1D].5#X\+T1)5CX-"CQ$258^/$9/3E0@4TE:13TU/CQ&3TY4
M('-I>F4]-3X\4U!!3B!C;&%S<STT-S,Q-3,S,3,M,30P.#$Y.3@^/$9/3E0@
M8V]L;W(](S P,#!F9B!F86-E/2(B( T*<VEZ93TR/CQ&3TY4(&9A8V4]0V]U
M<FEE<CYB96-A=7-E(&]F('1H92!L;W=E<B!N;VES92!L979E;',N)FYB<W [
M(#$P+6UE=&5R<R!I<R -"F=R96%T('1O;R$\+T9/3E0^/"]&3TY4/CPO4U!!
M3CX\1D].5"!F86-E/4-O=7)I97(^/"]&3TY4/CPO1D].5#X\+T9/3E0^/"]$
M258^#0H\1$E6/CQ&3TY4(%-)6D4]-3X\1D].5"!S:7IE/34^/%-004X@8VQA
M<W,]-#<S,34S,S$S+3$T,#@Q.3DX/CQ&3TY4(&-O;&]R/2,P,# P9F8@9F%C
M93TB(B -"G-I>F4],CX\1D].5"!F86-E/4-O=7)I97(^/"]&3TY4/CPO1D].
M5#X\+U-004X^/$9/3E0@#0IF86-E/4-O=7)I97(^/"]&3TY4/B9N8G-P.SPO
M1D].5#X\+T9/3E0^/"]$258^#0H\1$E6/CQ&3TY4(%-)6D4]-3X\1D].5"!S
M:7IE/34^/%-004X@8VQA<W,]-#<S,34S,S$S+3$T,#@Q.3DX/CQ&3TY4(&-O
M;&]R/2,P,# P9F8@9F%C93TB(B -"G-I>F4],CX\1D].5"!F86-E/4-O=7)I
M97(^2V5V:6XL(%="-5)513PO1D].5#X\+T9/3E0^/"]34$%./CQ&3TY4( T*
M9F%C93U#;W5R:65R/CPO1D].5#X\+T9/3E0^/"]&3TY4/CPO1$E6/@T*/$1)
M5CX\1D].5"!325I%/34^/$9/3E0@<VEZ93TU/CQ34$%.(&-L87-S/30W,S$U
M,S,Q,RTQ-# X,3DY.#X\1D].5"!C;VQO<CTC,# P,&9F(&9A8V4]07)I86P@
M#0IS:7IE/3(^/"]&3TY4/CPO4U!!3CXF;F)S<#L\+T9/3E0^/"]&3TY4/CPO
:1$E6/CPO1$E6/CPO0D]$63X\+TA434P^#0H`
`
end
```

Date: Sat, 15 Aug 1998 00:02:25 -0400
From: "John J. McDonough" <jjmcd@tm.net>
To: <JMcKee@RFMD.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [17545] Re: Vertical antennas and ground rods?
Message-ID: <199808141404.3325300@is1.tm.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

> From: John Mckee <JMcKee@RFMD.com>; owner-qrp-l@Lehigh.EDU
>
> Is it necessary to use a ground rod and radial wires under a ground
> mounted vertical, or
> just radial wires? Why?

As W4RNL said, but a lot more eloquently, it depends.

Most people will tell you to use at least 4 quarter wave radials. I suspect that may work much of the time. Sometimes, a ground rod is adequate, and radials are just wasted effort. Other times, no number of radials of any length will be adequate. It depends on your particular situation.

What you are really looking for is something to reflect the top of the vertical to make it look like a dipole. So you are trying to mimic an infinitely large, perfectly conducting plane. If your site is highly conductive, all you need to do is connect the coax to the ground, and a ground rod might be an adequate way to do that.

More likely, you need a better connection, and the radials help you do that. If the ground at your site happens to be very lossy, you may be unable to make it work at all. In that case, you're better off to get the whole thing off the ground and once in the sky, radials are as good as you can reasonably do.

My own (limited) experimentation seems to indicate that a conductive sheet is much better than radials, and doesn't need to be a quarter wave in radius, although it needs to be a significant fraction. At HF, this is usually impractical. Chicken wire seems to be a passable imitation, but I haven't yet gotten the ambition to bury a 66 foot circle of chicken wire.

So the best thing to do is experiment!

Don't you love those sorts of answers?

72/73 de WB8RCR
didileydadidah

Date: Fri, 14 Aug 1998 10:30:25 EDT
From: Bensondj@aol.com
To: dub@oklahoma.net
Cc: qrp-l@Lehigh.EDU
Subject: [17546] Elmer 101: audio oscillation
Message-ID: <662371a.35d44a04@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

on Thu, 13 Aug 1998, "j.w. thornton" <dub@oklahoma.net> wrote:
>> To: qrp-l@Lehigh.EDU
>> Subject: [17488] elmer101

>>Any time I hook my SW-40 to any kind of amplified speaker setup, ie: MFJ
>>DSP filter, SCAF filter, St Louis speaker amplifier, it soon goes into

>>oscillation. Makes a terrible noise thru whatever speaker it is hooked to.
...

 The most likely candidate is unwanted coupling through the power supply (Gary Surrency mentioned this in his very informative posting). The 2 AF stages in the SW+ series run 60 dB of gain. Adding another 20-25 dB with an amplified speaker puts a real premium on power-supply performance. The easiest way to check this is to run the amplifed speaker from an entirely separate power source- if the problem goes away, then power supply loading was the culprit. Let us know what you find. :-)

73, Dave- NN1G

Date: Fri, 14 Aug 1998 08:03:11 -0700 (PDT)
From: Monte Stark <ku7y@dri.edu>
To: Paul Harden <na5n@rt66.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17547] Re: The Zombie Shuffle Oct. 31Z
Message-ID: <Pine.SOL.3.96.980814075858.5477E-100000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Paul,

Sounds like fun!

If I promise to wear a nice dress during the contest,
can I count as a witchesses? :-)

I'll even make sure it doesn't have any stains.......

73, Ron, SOWP 5545M,

.........KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu...........Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Fri, 14 Aug 1998 07:26:23 -0800
From: "Jim Larsen (AL7FS)" <larsennc@alaska.net>
To: qrp-l@Lehigh.EDU
Subject: [17548] AL7FS QSL status

Message-ID: <35D4571F.B2C6B17A@alaska.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Cards for n2to, w9sul, kf0n, kb9amg, w2vrk, kc4veb are in the mail. More will be done today and this weekend. I am working through the backlog and apologize to all for my tardiness. Lots has happened in 1998.

73, Jim, AL7FS

Date: 14 Aug 1998 11:26:57 -0400
From: Glen Leinweber <leinwebe@mcmail.cis.mcmaster.ca>
To: qrp-l:;
Subject: [17549] SW40+ receiver gain, elmer sprint
Message-ID: <1998Aug14.112657-0400@[130.113.234.7]>

My SW40+ has been spread-eagled on the bench, under the hot lights, tied down with test-lead wires, poked and prodded for many weeks ;-)
 Elmer Sprint was the impetus to get it into a case, with all parts mounted. BTW: I always mount these little rigs with insulating standoffs and insulated jacks so that there's only ONE groundpoint to the case. For me, that's at the keyline jack - the only one that's not insulated. This way, groundloops are diminished a great deal.

 Anyway, was surprised by the receiver's gain. I made one mod to the xtal filter to match its output to U3. This involved selecting Y3 from the xtal junkbox for +100 Hz offset, and replacing R1 with a 39pf cap. This should give U3 more signal.
 The QRN noise level during the sprint was tolerable (nothing extra-ordinary), but I found that the RF GAIN pot wanted to be about half-way up. Full-up almost saturated the audio output with noise. Copied W1AW with the pot ALL THE WAY DOWN! I use $1 cheap headphones: the full-ear-cover efficient phones are just too sensitive. This is a hot receiver.
 Surprised to find that some regard RX gain a little weak. How many others find it on the high side, like me?

During the sprint, noticed that most student/student QSO's were almost bang-on (zero offset). So Dave's simple, fixed-

offset circuitry works very well, along with the receiver's
sidetone method.

Date: Fri, 14 Aug 1998 10:42:29 -0500
From: Ed Manuel <n5em@flash.net>
To: ku7y@dri.edu
Cc: qrp-l@Lehigh.EDU
Subject: [17550] Re: The Zombie Shuffle Oct. 31Z
Message-ID: <3.0.5.32.19980814104229.008cd970@pop.flash.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Only if properly documented pictures are taken and posted on
the web as proof.

Ed, N5EM

At 08:03 AM 8/14/98 -0700, you wrote:
>Hi Paul,
>
>Sounds like fun!
>
>If I promise to wear a nice dress during the contest,
>can I count as a witchesses? :-)
>
>I'll even make sure it doesn't have any stains.......
>
>73, Ron, SOWP 5545M,
>
>.........KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
>....ku7y@sage.dri.edu..........Washoe Lake, Nevada....
>....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....
>
>
>
>
Ed Manuel, N5EM
Houston, Texas
n5em@amsat.org
n5em@flash.net

Date: Wed, 12 Aug 1998 23:52:24 -0600
From: Armstrongs <barmstrong@MAIL.SISNA.COM>
To: "QRP-L List" <qrp-l@Lehigh.EDU>
Subject: [17551] QRP mobile bike
Message-ID: <1.5.4.32.19980813055224.009d1a10@mail.SISNA.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

VE3JC's QRP mobile on bicycle is one of the most amazing and interesting (crazy) efforts I have seen for a long time. My hearty congrats and attaboy for the work. Keep us informed.

de N7XJ, Bob in Central Utah

Date: Fri, 14 Aug 1998 08:53:14 -0700
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: <ku7y@dri.edu>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [17552] Re: The Zombie Shuffle Oct. 31Z
Message-ID: <017b01bdc79b$a5763e10$140a0a0a@double_trouble.reliablemeters.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Boy! These contester types will do almost anything to get an extra multiplier!

Ron, you can get the credit if you wear the dress, have Carol take a nice picture, and use that picture for your NCJ column for one whole year.

Mike K1MG

Date: Fri, 14 Aug 1998 09:05:27 -0700 (MST)
From: flydnq7x@primenet.com (Floyd Smithberg)

To: qrp-l@Lehigh.EDU
Subject: [17553] Re: The Zombie Shuffle Oct. 31Z
Message-ID: <199808141605.JAA09817@smtp02.primenet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>To: na5n@rt66.com
>From: flydnq7x@primenet.com (Floyd Smithberg)
>Subject: Re: The Zombie Shuffle Oct. 31Z
>Cc:
>Bcc:
>X-Attachments:
>
>Sounds like fun...BTW, that's our wedding anniversary. My witchess and I have
>been sharing QTH for 29 years...do I get a multiplier of 29??????
>>
>
73 Floyd NQ7X Phoenix ScQRPion

Date: Fri, 14 Aug 1998 11:19:25 -0500
From: "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
To: "'Monte Stark'" <ku7y@dri.edu>, "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [17554] RE: Vertical antennas and ground rods?
Message-ID: <19980814161927691.AAA245@muenzlerk>

You read it right but I probably should have been a bit clearer.

Connect the ground side of the vertical to the ground rods.
This is the braid of the coax.
Connect a resistor or RF choke from the radiator to the
ground rods. This provides a very low DC resistance for the
static buildup and a very high impedance to the RF. So your
transmitter should not "see" it at all. If you are building
a vertical for the low bands (40/80) make sure the RF choke
is of sufficiently high value. Again -- THIS WON'T PROTECT
YOUR STUFF IF YOUR ANTENNA TAKES A DIRECT OR CLOSE STRIKE.

Kevin

> -----Original Message-----
> From: Monte Stark [mailto:ku7y@dri.edu]
> Sent: Friday, August 14, 1998 10:38 AM
> To: Kevin Muenzler WB5RUE

> Subject: RE: Vertical antennas and ground rods?
>
>
> On Fri, 14 Aug 1998, Kevin Muenzler WB5RUE wrote:
>
> > You need the following to get good performance from a vertical.
> >
> > 1 - an excellent ground
> > 2 - an excellent radial system.
> >
>
>
>
> > Drive two or three 8-foot ground rods
> > in the ground right next to the base mount on the ground. Connect
> > these to the mast (however short it is) with good mechanical
> > connections.
>
>
> > Connect a large value resistor (33K or so) between
> > the vertical radiator and ground. This will bleed the static from
> > the antenna as it builds up.
>
> Hi Kevin,
>
> You might want to re-read this. I think it is saying to connect
> the vertical to the ground (rods) and connect a resistor from
> the vertical to the ground (rods).
>
> Someone might get confused. Or maybe it me that's confused! :-)
>
> cul,
>
> 73, Ron, SOWP 5545M,
>
> KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
> ku7y@sage.dri.edu...........Washoe Lake, Nevada....
> QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....
>

Date: Fri, 14 Aug 1998 09:45:24 PDT
From: "laura halliday" <marsgal42@hotmail.com>
To: qrp-l@Lehigh.EDU

Subject: [17555] Re: Miles per watt with BPSK?
Message-ID: <19980814164524.20155.qmail@hotmail.com>
Content-Type: text/plain

KC5TJA (kc5tja@topaz.axisinternet.com) wrote:

> What, exactly, does BPSK sound like? I envision that
> it'd sound pretty close to white noise.

Depending on the receiver, it will either go quiet, or
sound like an increase in background noise.

As for miles (!?) per watt, NASA and ESA routinely get
tens of millions when they talk to their deep space
probes. While some of their toys (*big* dishes, cryogenic
preamps) are out of reach of hams, everything else is
(or should be) accessible to hams.

Mars Pathfinder used BPSK with a residual carrier. It sent
data from Mars to Earth (191,000,000 km on 4 July 1997) at
4740 BPS, with a 10 watt transmitter on 8.4 GHz. Thus,
19.1 million km per watt. I couldn't find any transmitter
power numbers for Pioneer or Voyager... :-(

Pathfinder's coding - a rate 1/6 constraint length 15
convolutional inner code, concatenated with a (252,230)
Reed-Solomon outer code, with 5-way interleaving between
the two - is kid's stuff, well within reach of hams.

Laura Halliday VE7LDH "Laisse le vent tout emporter..."
Grid: CN88hk IOTA: NA036 - Foly/Viennet

Get Your Private, Free Email at http://www.hotmail.com

Date: Fri, 14 Aug 1998 11:47:18 -0500
From: Dave Sjolin <sjolin@swbell.net>
To: KA5T Larry Wise <lewise@inetport.com>, Qrp-l Reflector <qrp-l@Lehigh.EDU>
Subject: [17556] Re: component description
Message-ID: <35D46A16.DDF902C7@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

KA5T Larry Wise wrote:

> I thought the complete NN1G parts list was to be on the
> K5FO web site but I cannot fid it. Am looking for the
> specs for all of the toroids (core size and type and turns)
> and the specs for the three cans.....
>
> Any chance you can scan in the parts list and send it down????

No scanner but

L1 T-50-6 (25 turns) 0.50'' dia., yellow
L2 FT37-43, 6 turns 0.37" dia., dark grey
L3,L4 T-37-2, 1 uH, 16T #26 0.37" dia., red

T1-T3 10.7 Mhz IF transformer"42IF123"
T4 FT37-43, 8T:1T 0.37" dia., dark grey

Any questions, I will try to answer. 73 de Dave, N0IT

Date: Fri, 14 Aug 1998 08:52:14 -0700 (PDT)
From: Monte Stark <ku7y@dri.edu>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [17557] Antennas & Lightening
Message-ID: <Pine.SOL.3.96.980814083759.5933B-100000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

I have a question.....

If I had a 30' vertical sitting in the field with nothing
connected to it, there would be no real reason to worry
about a lightening strike. (Other than the damage to the
vertical and ground around it.)

Now I ad a radial system of ~100 one quarterish wires.

Still nothing to worry about.

Now I bring out a feed line and hook it up to the antenna
system, both the vertical and radial system.

Now I need to worry so.....

Why not make my connections to the system via a few inches
of very fine "fuse" wires? Connect an RF choke from the
rig side of each "fuse" to a few ground rods. Make sure the
RF choke can handle more current than the fuse wires.

Now if a strike happens, the surge comes to the RF choke
and heads for ground but the "fuse" soon opens and disconnects
the feed line.

Now I know that there will still be a large surge that gets
into the rig/tuner or if you are on top of things you have
it disconnected and grounded at the shack side.

Wouldn't this keep the MAJOR amount of power from getting
into the house?

At QRO levels this might still help but not sure you could
find chokes big enough to make the links blow.

The way most of us do it now we really have almost NO protection.
At least this might be a step in the right direction at a
cost we can afford.

Hmmmmm, just thought..... maybe the choke isn't that big
of a deal..... we could wind them on those little hard
donuts things..... not the TP that Doug uses because
those get wet! (Inside jode for those who have seen
Doug demonstrate how to wind those things!)

Anyway, it's a little food for thought.....

73, Ron, SOWP 5545M,

.........KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu...........Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Fri, 14 Aug 1998 12:57:54 -0400
From: "GARY McCAUGHEY" <MAIL4GARY@worldnet.att.net>
To: <qrp-l@Lehigh.EDU>
Subject: [17558] Ten Meter Foxes Awake !!
Message-ID: <19980814170007.RDWD28162@gary>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

Hello Fellow Hunters,

Guys, 10 meters is open every nite at my location. Not a nite goes by that I do not hear stations from either Midwest, Southwest or the Northeast on SSB late into the evening (10 and 11 PM EDST). Problem though....no CW activity. I call and call and no one answers. Find me on 28.040 +/- 1 KC most evenings from 9 to 11 PM EDST. See you there!!

Gary
W2UX
Lexington, SC

CW is the REAL THING! Use it or lose it........

Date: Fri, 14 Aug 1998 13:13:25 EDT
From: RangerSF5@aol.com
To: wb5rue@stic.net, qrp-l@Lehigh.EDU
Subject: [17559] Re: 15M DX
Message-ID: <741b9f6e.35d47036@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

In a message dated 98-08-14 09:49:05 EDT, wb5rue@stic.net writes:

<<
 Better get used to it! 15 meters is a great band during sunspot
 peaks! It outperforms 20 most of the time when it is open
 because of the lower noise levels. 10-meters is great too!
 >>
DX on 15 or ten meters is so easy when the band is opened it's a real drag to me.
Try busting in on a DX pile up on 40 with 3 watts.
Now thats what I call exciting and a real challange to boot.
Bob
WA2HOQ

Date: Fri, 14 Aug 1998 14:15:32 EDT
From: PDouglas12@aol.com
To: qrp-l@Lehigh.EDU

Subject: [17560] How to orient audio xfmr
Message-ID: <63b21b08.35d47ec5@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Hi gang,

I got this audio xfmr from Dan's Small parts as part of my most recent order (the order came through promptly, cheaply, and accurately, as usual, by the way). It is center tapped on the primary and on the secondary. And that, of course, is the problem. How do I tell which side is the 8 ohms and which is the 1k ohms? Will a Digital Voltmeter (DVM) do the job reliably by just measuring the resistance across the coils? How 'bout I put an audio sig in one side and see if it comes out at a higher (or lower) voltage on the other? Is there a dirty (read simple) way I am missing?

Thanks to the group for the help.

72,

Preston Douglas WJ2V

Date: Fri, 14 Aug 1998 11:22:05 -0800
From: "Russ Carpenter" <russ@natworld.com>
To: "QRP-L List" <qrp-l@Lehigh.EDU>
Subject: [17561] RESULTS OF THE 1998 FLIGHT OF THE BUMBLEBEES
Message-ID: <199808141823.LAA22055@guppy.pond.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

The Adventure Radio Society is pleased to report the results of the 1998 Flight of the Bumblebees, taking place on Sunday, July 26. The event was a complete success and we give our sincere thanks to those who participated.

The Soapbox has been published separately on The ARS Sojourner. Cruise over to http://www.natworld.com/ars.

Here's a quick synopsis of the rules:

Maximum power is five watts. We operate CW on 40, 20, 15 and 10 meters, on the standard QRP frequencies. We want this to be a national contest, so we encourage long-range contacts by giving double points for 20, 15 and 10 meters. 40 meter contacts receive one point. The same station can be worked

on different bands for additional QSO points and multipliers. Contacts with Bumblebees generate a 3X multiplier.
Separate but equal prizes are awarded
to the home-based and Bumblebee winners.

Call	40M	20M	15M	10M	Points	Bees	Score
KD7AEE	3	96	0	0	195	33	19305
N0UR/BB	3	73	4	9	175	36	18900
N4DD/BB	24	53	0	0	130	36	14040
W7QC	3	49	8	0	117	32	11232
N4ROA/BB	28	41	3	2	120	31	11160
W7ZOI/BB	4	45	8	0	110	30	9900
W0CQC	0	53	0	0	106	24	7632
K7TQ	0	60	0	0	120	21	7560
W1VT	0	51	1	0	104	24	7488
VE3JC/BB	15	41	2	0	101	24	7272
N7XJ/BB	0	66	0	0	132	18	7128
N6MM	10	37	8	0	100	21	6300
AE4GX	9	37	1	0	85	21	5355
K0EVZ/BB	0	46	0	0	92	19	5244
N2SMH/BB	0	41	0	0	82	21	5166
N6GA/BB	8	30	1	0	70	24	5040
VE3ELA/BB	0	9	28	0	74	22	4884
AA5BK	0	32	0	0	64	21	4032
W0CH/BB	2	33	0	0	68	19	3876
N2CQ	27	22	0	0	71	16	3408
AA4XX	0	28	1	0	58	19	3306
KG0MZ/BB	2	20	0	0	42	22	2772
WE6W	13	19	0	0	51	18	2754
W3TS/BB	24	13	0	0	50	18	2700
NN9K	0	30	0	0	60	14	2520
WF4I/BB	6	18	0	0	42	18	2268
AL7FS	0	24	0	0	48	15	2160
KI0II	0	27	0	0	54	13	2106
KQ0I	2	22	1	0	48	14	2016
KD7S/BB	10	16	1	0	44	15	1980
N4IBT/BB	0	22	0	0	44	15	1980
K4PYM	5	18	0	0	41	16	1968
N7CEE/BB	0	19	6	0	50	13	1950
W9SUL	0	22	0	0	44	14	1848
AC6KW/BB	0	25	0	0	50	12	1800
N2TO/BB	27	16	0	0	59	10	1770
W4DU/BB	17	7	4	0	39	14	1638
KK5NA/BB	0	22	0	0	44	12	1584
WF6B/BB	8	16	0	0	40	13	1560
WD8RIF/BB	32	2	0	0	36	13	1404

N7CQR/BB	0	22	0	0	44	10	1320
AD4MZ/BB	0	19	0	0	38	10	1140
N0TU/BB	0	18	0	0	36	10	1080
AC6XK/BB	8	12	0	0	32	11	1056
VE5QRP	0	15	0	0	30	11	990
AB7OA/BB	0	16	0	0	32	10	960
K6PZB/BB	11	7	0	0	25	11	825
W7SNV	0	11	0	0	22	11	726
NB0Z	0	12	0	0	24	9	648
K4JSI	17	2	0	0	21	10	630
KO6KA/BB	0	15	0	0	30	7	630
K0SU	0	11	0	0	22	9	594
KO4WX	3	9	1	0	23	8	552
AB7TT/BB	0	12	0	0	24	7	504
VE1MT/BB	0	8	0	0	16	8	384
KB9LCK	0	9	0	0	18	6	324
K7ZEN/BB	0	10	0	0	20	5	300
AA7LE/BB	0	10	0	0	20	5	300
N2TNN	18	0	0	0	18	5	270
K2UD	0	7	0	0	14	5	210
W8MHV	0	7	0	0	14	4	168
WA8GHZ	0	5	0	0	10	5	150
N4UY	0	4	0	0	8	3	72
WB5GWB	3	1	0	0	5	4	60
N4PWP	0	1	1	1	6	3	54
AA8PJ	0	4	0	0	8	2	48
KF4AR/BB	2	1	1	0	6	2	36
K4AVX	4	0	0	0	4	3	36
KU7Y	1	2	0	0	5	2	30
K3PM	0	1	0	0	2	1	6

Date: Fri, 14 Aug 1998 11:23:47 -0800
From: "Russ Carpenter" <russ@natworld.com>
To: "QRP-L List" <qrp-l@Lehigh.EDU>
Subject: [17562] Soapbox for the 1998 Flight of the Bumblebees
Message-ID: <199808141823.LAA22062@guppy.pond.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

The Soapbox for the 1998 Flight of the Bumblebees is a classic. The stories published therein will make you proud to be a member of the QRP Community.

You'll find the Soapbox in a special update to The ARS Sojourner, at http://www.natworld.com/ars. We suggest that you save the file as text or

html source. Then, whenever you're in need of a little inspiration, open the file and enjoy!

By the way, the August Sojourner is brimming with other wonderful material. Bill Jones, Lorraine Aubert, and Joe Gervais have made their usual ourstanding contributions.

Russ Carpenter
Contest Manager for Adventure Radio Society

Date: Fri, 14 Aug 1998 19:20:47 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
To: af389@lafn.org
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17563] Re: Which type resistor?
Message-ID: <tC7PmHA$$H11EwQY@lfheller.demon.co.uk>
MIME-Version: 1.0

In message <35D43903.F49CA953@lafn.org>, David Shalita <af389@lafn.org> writes
>Hi,
>
>I am building the Noise Source circuit in 1990 ARRL HAM Handbook, that uses a
>Noise/Com Diode and precision 1% resistors.
>
>I found metal film and carbon film 1% resistors for sale.
>
>These resistors are used in the attenuator to establish 50 ohms and a low
>SWR. Which type is best for this RF circuit?

Metal film are more stable, have lower noise, are smaller and are more reliable than carbon film. I think that they also they have better high frequency performance - can anyone confirm this?

One supplier I use (Maplin) has 1% metal film as their standard resistor range. The 600 mW devices are the same size as 1/4 W carbon film.

>Besides Digikey and possibly TECH AMERICA, who sells them?

Farnell.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424

See http://www.lfheller.demon.co.uk/dds.htm for details of a simple AD9850 DDS system. See " "/diy_dsp.htm for a simple DIY DSP ADSP-2104 system.

Date: Fri, 14 Aug 1998 22:44:15 +0300
From: Arjen Raateland <Arjen.Raateland@vyh.fi>
To: ku7y@dri.edu
Cc: QRP-L <QRP-L@Lehigh.EDU>
Subject: [17564] Re: Antennas & Lightening
Message-ID: <35D4938F.134F@vyh.fi>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

Monte Stark wrote:
> Why not make my connections to the system via a few inches
> of very fine "fuse" wires? Connect an RF choke from the
> rig side of each "fuse" to a few ground rods. Make sure the
> RF choke can handle more current than the fuse wires.
>
> Now if a strike happens, the surge comes to the RF choke
> and heads for ground but the "fuse" soon opens and disconnects
> the feed line.

> Anyway, it's a little food for thought.....

Hi Ron and gang,

The lightning may just jump the fuse after it opened. After all it's only a few cm's. The air will be ionized and conduct... Well, it could be.

We should ask Gary Coffman of Destructive System Testing or some such, who regulary posts to the USEnet radio amateur groups. He seems to know a LOT about these things.

cheerio, oh2zaz
--
Arjen Raateland
Finnish Environment Institute
SAS Support
phone +358 9 4030 0350

Date: Fri, 14 Aug 1998 16:40:59 EDT
From: PDouglas12@aol.com
To: qrp-l@Lehigh.EDU
Subject: [17565] how to orient transformer--thanks guys
Message-ID: <6003727c.35d4a0dd@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Gang,

I received so many answers to how to do it that I can't even thank everyone individually. So thanks to all, and it never ceases to amaze me how many talented people are "listening" all the time here. While there were some terrific, sophisticated suggestions, I was able to measure about 62 ohms on the 1k side and 1.2 ohms on the 8 ohm side. That's it. Thanks folks.

72,

Preston Douglas WJ2V

Date: Fri, 14 Aug 1998 16:09:38 -0500
From: "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
To: <Arjen.Raateland@vyh.fi>, "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [17566] RE: Antennas & Lightening
Message-ID: <19980814210941434.AAA296@muenzlerk>

Check out http://www.arrl.org/tis/info/lightnin.html
or polyphaser at http://www.polyphaser.com

> -----Original Message-----
> From: owner-qrp-l@Lehigh.EDU
> [mailto:owner-qrp-l@Lehigh.EDU]On Behalf Of
> Arjen Raateland
> Sent: Friday, August 14, 1998 2:44 PM
> To: Low Power Amateur Radio Discussion
> Subject: Re: Antennas & Lightening
>
>
> Monte Stark wrote:
> > Why not make my connections to the system via a few inches
> > of very fine "fuse" wires? Connect an RF choke from the

> > rig side of each "fuse" to a few ground rods. Make sure the
> > RF choke can handle more current than the fuse wires.
> >
> > Now if a strike happens, the surge comes to the RF choke
> > and heads for ground but the "fuse" soon opens and disconnects
> > the feed line.
>
> > Anyway, it's a little food for thought.....
>
> Hi Ron and gang,
>
> The lightning may just jump the fuse after it opened. After all it's
> only a few cm's. The air will be ionized and conduct... Well, it could
> be.
>
> We should ask Gary Coffman of Destructive System Testing or some such,
> who regulary posts to the USEnet radio amateur groups. He
> seems to know
> a LOT about these things.
>
> cheerio, oh2zaz
> --
> Arjen Raateland
> Finnish Environment Institute
> SAS Support
> phone +358 9 4030 0350
>
>

Date: Fri, 14 Aug 98 17:22:11 EDT
From: hodgins@rtp.semi.harris.com (Bob Hodgins (919)405-3620)
To: qrp-l@Lehigh.EDU
Subject: [17567] Re: elmer101 audio instability
Message-ID: <9808142122.AA09481@pollux.draco>

One simple explaination for the problem with driving external audio devices
(i.e. not stereo headphones) may be in the connections to the
mini-stereo jack. The audio must be connected to the tip and the
SW40's ground to the other channel. This is assuming the jack has been
isolated from the chassis with an enlarged hole and a fiber mounting
washer. This puts ground on the ring of a mono plug when inserted into
the stereo jack. If the stereo jack connections are reversed, then a
mono plug will put the external amplifier's ground on the op-amp output

and its audio input on the SW40 ground. It might work with an ideally isolated amplifier, but in reality, a nasty ground loop or just plain short will be created. Been there did that.

Bob, KS4HQ
Durham, NC

Date: 14 Aug 1998 16:42:47 -0500
From: "rohre" <rohre@arlut.utexas.edu>
To: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>, qrp-l@Lehigh.EDU
Subject: [17568] Great Vertical Antennas memo
Message-ID: <n1309009490.39617@msmailgw1.arlut.utexas.edu>

L. B. Cebik has provided a fine definitive exposition on the differing types of basic vertical antennas; both quarter wave monopole, and vertical dipole. Many hams by their comments and repeating of old dogma, confuse the issue of what verticals are complete resonant antennas, and which depend on the ground plane or radials to complete the structure.

Congratulations L. B., and for aspiring antenna buyers or builders, file that one away from Digest 1182.

Now, a question was asked on the list about two brands of verticals, both of which I have used, (and I still use another Gap WARC model now.)

I would answer the Gap vs. Butternut question by commenting that the two WARC bands could be added with some experimentation, or additional vertical dipoles of wire could be erected for those bands
to make the brands comparison not depend on bands covered.

I believe then the choice should also consider that even though Butternut is not calling their use of coil inductors and ceramic fixed capacitors, "traps"; nonetheless, they are using finite lumped L and C elements that have inductive losses such as traps would have. The question becomes, is the Q of the air wound tubing coils high enough to have very small losses relative to the effective length of the antenna.? Hopefully, the ceramic capacitors are of high quality, but one must recognize their fragile material in outdoor use, as well.

Now the Gap does not use coils or ceramic capacitors in band decoupling. It does use linear decouplers to isolate the lengths to produce antenna resonance.
They are long pieces of aluminum tubing with some bolted jumper connections, and one must evaluate the resistive losses of the connections vs. the inductor losses, and the inductor bolt on connections of the other brand antenna.

Tubing would be nearly as low loss as the antenna main element, and hopefully a much smaller loss than discrete components. The Gap also uses a capacitor loaded matching stub of coax inside the vertical. This stub is a factor on 80M, but a valid question is, does its capacitance/ inductance represent a loss on the other bands?
(It is resonant on one band and parallels the feed point.)

In the modeling of antennas, I do not recall seeing such comparisons of the losses of linear decoupling vs. discrete component tuned decoupling or whatever Butternut is doing. Is it possible to include this in modeling such antennas?

The effect of such losses may well depend on what percentage they are relative to the effective length of the vertical elements on each band for each antenna. (The antennas are similar in maximum length.) Hopefully, one could evaluate the aspects and conclude logically which antenna carries more loss. Intuitively, linear decoupling appears to be the lower loss because no lumped components are in use. But, this might well become more of an issue as an antenna ages, and some components wear less gracefully than others. I know from past times when Butternut was located in this area, that they had problems with the losses in the ceramic capacitors they got from one vendor, and had to develop vendors with lower loss ceramic capacitors. (One of thier engineers discussed this in a program on the Butternut he did for our club.)

Hopefully, I have outlined some of the considerations that one must evaluate in choosing antennas based on their construction.

Also, my personal choice tends to favor the wider bandwidth antennas. Those with lumped circuit elements seem to have a more narrow SWR range without the help of the Transmatch, but of course, a broad low SWR does not guarantee efficiency, as the dummy load shows the lowest SWR of all.

Just when L. B. settled one long standing misunderstanding, now here comes more controversy! Aren't antennas fun! :-)

It would be interesting if someone has already done the detailed analysis of the losses of linear decouplers vs. other methods. I would also like to hear if anyone has worked on adding bands to older pre WARC commercial antenna designs that cover the traditional "harmonic" bands. (80, 40, 20, 10)

I plan to re-examine the Butternut illustrations, for it is not clear to me that they could be using the whole length on EVERY band. As best I remember, the tuned elements in the Butternut are in parallel resonance, and thus resemble traps. But I am reminded by Capt. Paul Lee's excellent book on verticals, they could be used, much as the parallel circuit of the Franklin vertical antenna does not function as a trap because there is another quarter wave element beyond the parallel circuit.

If the antenna element is shorter than this quarter wave, (or maybe 1/8 wave?) beyond the tuned circuit, then the circuit will act as a trap Capt. Lee stated.

Hopefully, some one has some data on these issues.
72,
Stuart K5KVH
Round Rock, (central) TX

Date: Fri, 14 Aug 1998 18:05:03 -0400
From: n7ri@juno.com (Ralph L Irons)
To: qrp-l@Lehigh.EDU
Subject: [17569] Re: SW40-plus receiver gain
Message-ID: <19980814.180504.6670.0.N7RI@juno.com>

Glen asks about SW40-plus receiver gain -- mine has enough to blow my socks off. I crank the RF gain to practically zilch except for the weakest
of signals.

Sure enjoyed hearing all those clear little notes during the Elmer sprint!

72, Ralph N7RI
Charlottesville VA

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Get completely free e-mail from Juno at http://www.juno.com
Or call Juno at (800) 654-JUNO [654-5866]

Date: Fri, 14 Aug 1998 13:31:44 -0500
From: "j.w. thornton" <dub@oklahoma.net>
To: qrp-l@Lehigh.EDU
Subject: [17570] Re: SW40+ receiver gain, elmer sprint
Message-ID: <3.0.3.32.19980814133144.00b447b4@oklahoma.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Glen Leinweber wrote:

> Surprised to find that some regard RX gain a little
>weak. How many others find it on the high side, like me?

I find it to be weak ONLY when using a speaker. It drives the sox off my headphones.

J. W. (Dub) Thornton WA5YFY
Minco, Okla.

Date: Fri, 14 Aug 1998 17:33:09 -0500
From: "j.w. thornton" <dub@oklahoma.net>
To: qrp-l@Lehigh.EDU
Subject: [17571] Re: elmer101 audio instability
Message-ID: <3.0.3.32.19980814173309.00b4a870@oklahoma.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Well, my face is extremely RED, but is this a great list or what??? I asked for help on my audio instability with the SW-40 into an amplified speaker/DSP filter, etc, got prompt replies from Gary Surrency, Dave Benson and Glen Leinweiber, all telling me to look for a ground loop (among other things). Another post from Bob, dont have the call handy just hit the nail on the head, but I did not read it until the problem had been solved. I had indeed reversed the leads on my audio jack, which worked fine on headphones or speakers, but raised "Ole Billy" on an amplified speaker/filter.

My sincere thanks to all. I believe the problem is solved. "72"

J. W. (Dub) Thornton WA5YFY
Minco, Okla.

End of QRP-L Digest 1183

